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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,769	01/28/2004	Peter Heiligensetzer	71278	3236
23872	7590	12/15/2004	EXAMINER	
MCGLEW & TUTTLE, PC 1 SCARBOROUGH STATION PLAZA SCARBOROUGH, NY 10510-0827			MARTIR, LILYBETT	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/766,769	Applicant(s) HEILIGENSETZER ET AL.	
	Examiner Lilybett Martir	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 10-14, 16-18 and 20 is/are rejected.
- 7) ☒ Claim(s) 5, 7-9, 15 and 19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/28/04</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claim 2 is objected to because of the following informalities: the recitation of "Method according to the preamble of claim 1, particularly according to claim 1" is redundant. Also, in claim 12, the recitation of "Method according to the preamble of claim 11, particularly according to claim 11" is redundant. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4,6,11-14 and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Onda et al. (Pat. 4,791,588).

- With respect to claims 1 and 11, Onda et al. teaches at least two measuring devices as in elements 56a, 56b and 55a-55d for detecting different measured quantities as measured values on movable parts of the machine as is element 5 shown in Figure 8A, at least one processing unit as are elements 20 and 30, for at least one measured value of a measured quantity for processing the same into a first measure result comparable with another measured value of another measured quantity or a second measure result obtained therefrom (Col. 11, lines 3-24) and by a comparison unit COM for

comparing the first measure result with at least the measured value of another measured quantity or a second measure result obtained as a result thereof (Col. 19, lines 31-39).

- With respect to claims 2 and 12, Onda et al. teaches measuring devices as in elements 56a, 56b and 55a-55d for determining material strains (Col. 9, lines 32-59).
- With respect to claims 3 and 13, Onda et al. teaches the devices for determining material strains as in elements 56a, 56b and 55a-55d are constructed as transducers (Col. 9, lines 32-59).
- With respect to claims 4 and 14, Onda et al. teaches the devices for determining material strains as in elements 56a, 56b and 55a-55d are constructed as strain gauges (Col. 9, lines 32-59).
- With respect to claims 6 and 16, Onda et al. teaches the least one device for determining material strains as in elements 56a, 56b and 55a-55d are placed on at least two surfaces of a robot part as noted in the way said elements are arranged in part 5 shown in Figure 8A.
- With respect to claim 17, Onda et al. teaches a monitoring device as are elements 20 and 30 to which is connected at least one device for determining material strains as in elements 56a, 56b and 55a-55d on machine parts 5.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Onda et al. in view of Shimada (JP 405269684A).

- With respect to claim 18, Onda et al. fails to teach the utilization his monitoring device with elongation monitoring means in his arrangement. Shimada teaches the utilization of a monitoring device 21 that has units for monitoring at least elongations of the robot's machine structure, as does element 13. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teachings of the driving system of Onda et al. utilizing the teachings of the robot device of Shimada by providing said system with elongation monitoring means to produce an output depending on the travel distance of the mover so that it's position is accurately known and controlled (See Abstract).

6. Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onda et al. in view of Parker et al. (Pat. 4,715,773).

- With respect to claims 10 and 20, Onda et al. fails to specifically disclose that his monitoring device has a device for disconnecting the machine. Parker et al. teaches that the utilization of position controlling for the purpose of

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stopping or disconnecting his apparatus from applying more force when a predetermined force is measured is known and expected (Col. 16, lines 12-31). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teachings of the driving system of Onda et al. utilizing the teachings of the robotic apparatus of Parker et al. by providing his monitoring device has a device for disconnecting the machine to further protect the objects and users of said robot from force overloads.

Allowable Subject Matter

7. Claims 5,7-9,15 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, or if the limitations in said claims are inserted in the base claim, form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilybett Martir whose telephone number is (571)272-2182. The examiner can normally be reached on 9:00 AM to 5:30 PM.


9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571)272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lilybett Martir
Examiner
Art Unit 2855

RCM



EDWARD LEEKOWITZ
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